



Arkansas Continuity
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In late March and early April 2009, cases of human infection with this H1N1 virus were first reported in Southern California and near San Antonio, Texas. Other U.S. states have since reported cases of H1N1 flu infection in humans and cases have been reported internationally as well.

Pandemic Flu

A pandemic is a global disease outbreak. A flu pandemic occurs when a new influenza virus emerges for which people have little or no immunity and for which there is no vaccine. The disease spreads easily person-to-person, cause's serious illness, and can sweep across the country and around the world in very short time. An influenza pandemic may be caused by either swine (pig) or avian (bird) flu viruses.

There are currently cases of human infection with H1N1 throughout the world, including the United States. Health professionals are concerned about the possibility that this virus could become a pandemic for the following reasons:

- It is a never-before seen combination of human, swine, and avian influenza viruses.
- It is being spread from human to human.
- The age group most affected is healthy, young adults (unlike seasonal flu).
- Like other influenza viruses, it continues to evolve.

The World Health Organization is coordinating a global response to human cases of the H1N1 flu and monitoring the corresponding threat of an influenza pandemic. Access the [\(WHO\) H1N1 Web site](#) for the current information on the international situation.

Human Infection with H1N1 Influenza Viruses

H1N1 flu viruses do not normally infect humans. However, sporadic human infections with H1N1 flu have occurred. Most commonly, these cases occur in persons with direct exposure to pigs (e.g. children near pigs at a fair or workers in the swine industry).

Human-to-human transmission of H1N1 flu can also occur. This is thought to happen in the same way as seasonal flu occurs in people, which is mainly through coughing or sneezing of people infected with the influenza virus. People may become infected by touching something with flu viruses on it and then touching their mouth or nose.

In the past, CDC received reports of approximately one human H1N1 influenza virus infection every one to two years in the U.S., but from December 2005 through February 2009, 12 cases of human infection with H1N1 influenza were reported. For the information on the number of H1N1 flu cases that have occurred since then, visit the Centers for Disease Control and Prevention (CDC) H1N1 Web site.

H1N1 influenza viruses are not transmitted by food. You cannot get H1N1 influenza from eating pork or pork products. Eating properly handled and cooked pork and pork products is safe. Cooking pork to an internal temperature of 160°F kills the H1N1 flu virus as it does other bacteria and viruses.

Symptoms

The symptoms of H1N1 flu in people are similar to the symptoms of regular human [seasonal influenza](#) and include fever, lethargy, lack of appetite and coughing. Some people with H1N1 flu have also reported runny nose, sore throat, nausea, vomiting and diarrhea.

Diagnosis

To diagnose H1N1 influenza infection, a respiratory specimen would generally need to be collected within the first 4 to 5 days of illness (when an infected person is most likely to be contagious). However, some persons, especially children, may be infectious for 10 days or longer. Confirmation on an H1N1 virus requires sending the specimen to CDC for laboratory testing.

Vaccination and Treatment for H1N1 Virus in Humans

There currently is no commercially available vaccine to protect humans against this H1N1 virus. The H1N1 flu virus strains causing the current outbreak are very different from human H1N1 viruses and, therefore, vaccines for this past human seasonal flu would not provide protection from these H1N1 flu viruses.

If you get sick, antiviral drugs can make your illness milder and make you feel better faster. They may also prevent serious influenza complications. In treatment, antiviral drugs work best if started as soon after getting sick as possible, and might not work if started more than 48 hours after illness starts.

Influenza antiviral drugs also can be used to prevent influenza when they are given to a person who is not ill but who has been or may be near a person with H1N1 influenza. When used to prevent the flu, antiviral drugs are about 70% to 90% effective. When used for prevention, the number of days that they should be used will vary depending on a person's particular situation.

There are four different antiviral drugs that are licensed for use in the U.S. for the treatment of influenza. At this time, CDC recommends the use of oseltamivir (brand name Tamiflu ®) or zanamivir (brand name Relenza ®) for the treatment and/or prevention of infection with H1N1 influenza viruses. The other two antivirals, amantadine and rimantadine, are ineffective for treating the most recent H1N1 flu viruses in humans.

How you can prepare

There are a number of things that you can do to prepare yourself and those around you for a flu pandemic. It is important to think about the challenges that you might face, particularly if a pandemic is severe.

Go through a [Planning Checklist](#) to be sure that you plan for the impact of a flu pandemic on you, your family and your business. For more information specific to individuals, families, and your workplace, and for information directed toward schools, health care providers, community organizations and governments, see [Plan & Prepare](#).

Take common-sense steps to limit the spread of germs. Make good hygiene a habit.

- Wash hands frequently with soap and water.
- Cover your mouth and nose with a tissue when you cough or sneeze.
- Put used tissues in a wastebasket.
- Cough or sneeze into your upper sleeve if you don't have a tissue.
- Clean your hands after coughing or sneezing. Use soap and water or an alcohol-based hand cleaner.
- Stay at home if you are sick.

• What would be the Impact of a Pandemic?

A pandemic may come and go in waves, each of which can last for six to eight weeks.

An especially severe influenza pandemic could lead to high levels of illness, death, social disruption, and economic loss. Everyday life would be disrupted because so many people in so many places become seriously ill at the same time. Impacts can range from school and business closings to the interruption of basic services such as public transportation and food delivery.

Pandemics Death Toll Since 1900	
1918-1919	
U.S....	675,000+
Worldwide...	50,000,000+
This as per the CDC.	
1957-1958	
U.S....	70,000+
Worldwide...	1-2,000,000
1968-1969	
U.S....	34,000+
Worldwide...	700,000+

A substantial percentage of the world's population will require some form of medical care. Health care facilities can be overwhelmed, creating a shortage of hospital staff, beds, ventilators and other supplies. Surge capacity at non-traditional sites such as schools may need to be created to cope with demand.

The need for vaccine is likely to outstrip supply and the supply of antiviral drugs is also likely to be inadequate early in a pandemic. Difficult decisions will need to be made regarding who gets antiviral drugs and vaccines.

Death rates are determined by four factors: the number of people who become infected, the virulence of the virus, the underlying characteristics and vulnerability of affected populations and the availability and effectiveness of preventive measures.

[Assessing the Severity of an Influenza Pandemic](#) (World Health Organization) (May 11, 2009)

From this link you may learn what factors influence the overall severity of a pandemic. Includes discussion of H1N1 flu (swine flu).

Source: www.pandemicflu.gov